VOLUME CONTENTS

to Volume 142, January–April, 1996

ARCHAMBAULT, JACQUES, DAVID B. JANSMA and JAMES D. FRIESEN, Underproduction of the largest subunit of RNA polymerase II causes temperature sensitivity, slow growth, and inositol auxotrophy in *Saccharomyces cerevisiae* 737–747

ARGESON, ALYSIA C., KELLY K. NELSON and LINDA D. SIRACUSA, Molecular basis of the pleiotropic phenotype of mice carrying the *Hypervariable Yellow* (A^{hvy}) mutation at the *Agouti* locus 557–567

ASTERIS, GEORGIOS, and SAHOTRA SARKAR, Bayesian procedures for the estimation of mutation rates from fluctuation experiments 313–326

BEDELL, MARY A., LINDA S. CLEVELAND, T. NORENE O'SULLIVAN, NEAL G. COPELAND and NANCY A. JENKINS, Deletion and interallelic complementation analysis of *Steel* mutant mice 935–944

BEDELL, MARY A., NEAL G. COPELAND and NANCY A. JENKINS, Multiple pathways for *Steel* regulation suggested by genomic and sequence analysis of the murine *Steel* gene 927–934

BERG, OTTO G., Selection intensity for codon bias and the effective population size of *Escherichia coli* 1379–1382

BROWN, JAMES R., KAREN BECKENBACH, ANDREW T. BECKENBACH and MICHAEL J. SMITH, Length variation, heteroplasmy and sequence divergence in the mitochondrial DNA of four species of sturgeon (*Acipenser*) 525–535

CABALLERO, ARMANDO, A note on the change in gene frequency of a selected allele in partial full-sib mating populations 649–650

CASAVANT, N. CAROL, AMY N. SHERMAN and HOLLY A. WICHMAN, Two persistent LINE-1 lineages in *Peromyscus* have unequal rates of evolution 1289–1298

CHEN, RUEY-SHYANG, and BRUCE A. MCDONALD, Sexual reproduction plays a major role in the genetic structure of populations of the fungus *Mycosphaerella graminicola* 1119–1127

CHEVERUD, JAMES M., ERIC J. ROUTMAN, F. A. M. DUARTE, BRUNO VAN SWINDEREN, KILINYAA COTHRAN and CHRISTY PEREL, Quantitative trait loci for murine growth 1305–1319

CHUN, KRISTIN T., and MARK G. GOEBL, The identification of transposon-tagged mutations in essential genes that affect cell morphology in *Saccharomyces cerevisiae* 39–50

CHUNG, KUANG-REN, ADRIAN LEUCHTMANN and CHRISTOPHER L. SCHARDL, Inheritance of mitochondrial DNA and plasmids in the ascomycetous fungus, *Epichloë typhina* 259–265

CORLEY-SMITH, GRAHAM E., CHINTEN JAMES LIM and BRUCE P. BRANDHORST, Production of androgenetic zebrafish (*Danio rerio*) 1265–1276

DES ETAGES, SHELLEY ANN G., DARLENE A. FALVEY, RICHARD J. REECE and MARJORIE C. BRANDRISS, Functional analysis of the PUT3 transcriptional activator of the proline utilization pathway in *Saccharomyces cerevisiae* 1069–1082

DE VILLENA, F. PARDO-MANUEL, C. SLAMKA, M. FONSECA, A. K. NAUMOVA, J. PAQUETTE, P. PANNUNZIO, M. SMITH, A. VERNER, K. MORGAN and C. SAPIENZA, Transmission-ratio distortion through F_1 females at chromosome *11* loci linked to *Om* in the mouse DDK syndrome 1299–1304

DICKSON, BARRY J., ALEXANDRA VAN DER STRATEN, MARÍA DOMÍNGUEZ and ERNST HAFEN, Mutations modulating Raf signaling in Drosophila eye development 163–171

DOERGE, R. W., and G. A. CHURCHILL, Permutation tests for multiple loci affecting a quantitative character 285–294

DOUMS, CLAUDIE, PHILIPPE BREMOND, BERNARD DELAY and PHILIPPE JARNE, The genetical and environmental determination of phally polymorphism in the freshwater snail *Bulinus truncatus* 217–225

DUFFY, JOSEPH B., JAMES WELLS and J. PETER GERGEN, Dosage-sensitive maternal modifiers of the Drosophila segmentation gene *runt* 839–852

EBERLE, JAMES R., and JO ANN BANKS, Genetic interactions among sex-determining genes in the fern *Ceratopteris richardii* 973–985

EHLER, LINDA L., JEFFREY A. HOLMES and SUSAN K. DUTCHER, Loss of spatial control of the mitotic spindle apparatus in a *Chlamydomonas reinhardtii* mutant strain lacking basal bodies 651–654

ELENA, SANTIAGO F., FERNANDO GONZÁLEZ-CANDELAS, ISABEL S. NOVELLA, ELIZABETH A. DUARTE, DAVID K. CLARKE, ESTEBAN DOMINGO, JOHN J. HOLLAND and ANDRÉS MOYA, Evolution of fitness in experimental populations of vesicular stomatitis virus 673–679

EVANGELISTA, CARLOS C., JR., ANA M. RODRIGUEZ TORRES, M. PAULLIN LIMBACH and RICHARD S. ZITOMER, Rox3 and Rts1 function in the global stress response pathway in baker's yeast 1083–1093

FAN, HUA-YING, KENNETH K. CHENG and HANNAH L. KLEIN, Mutations in the RNA polymerase II transcription machinery suppress the hyperrecombination mutant *hpr1*Δ of *Saccharomyces cerevisiae* 749–759

FOSTER, PATRICIA L., JEFFREY M. TRIMARCHI and RUSSELL A. MAURER, Two enzymes, both of which process recombination intermediates, have opposite effects on adaptive mutation in *Escherichia coli* 25–37

FREITAG, MICHAEL., NELIMA DIGHDE and MATTHEW S. SACHS, A UV-induced mutation in Neurospora that affects translational regulation in response to arginine 117–127

GEORGE, JANET A., WILLIAM D. BURKE and THOMAS H. EICKBUSH, Analysis of the 5′ junctions of *R2* insertions with the 28S gene: implications for non-LTR retrotransposition 853–863

GEORGIEV, PAVEL., and MARINA KOZYCINA, Interaction between mutations in the *suppressor of Hairy wing* and *modifier of mdg4* genes of *Drosophila melanogaster* affecting the phenotype of *gypsy*-induced mutations 425–436

GEPNER, JANICE, MIN-GANG LI, SUSAN LUDMANN, CYNTHIA KORTAS, KRISTIN BOYLAN, STANLEY J. P. IYADURAI, MAURA MCGRAIL and THOMAS S. HAYS, Cytoplasmic dynein function is essential in *Drosophila melanogaster* 865–878

GREEN, M. M., The "genesis of the white-eyed mutant" in *Drosophila melanogaster*: a reappraisal 329–331

GRIVET, LAURENT, ANGÉLIQUE D'HONT, DANIÈLE ROQUES, PHILIPPE FELDMANN, CLAIRE LANAUD and JEAN CHRISTOPHE GLASZMANN, RFLP mapping in cultivated sugarcane (*Saccharum* spp.): genome organization in a highly polyploid and aneuploid interspecific hybrid 987–1000

GUO, MEI, DOUG DAVIS and JAMES A. BIRCHLER, Dosage effects on gene expression in a maize ploidy series 1349–1355

GUSTAVSON, ELIZABETH, ANDREW S. GOLDSBOROUGH, ZEHRA ALI and THOMAS B. KORNBERG, The Drosophila *engrailed* and *invected* genes: partners in regulation, expression and function 893–906

HARRIS, REUBEN S., KIMBERLY J. ROSS and SUSAN M. ROSENBERG, Opposing roles of the Holliday junction processing systems of *Escherichia coli* in recombination-dependent adaptive mutation 681–691

HENRY, MICHAEL, CHRISTINA Z. BORLAND, MARK BOSSIE and PAMELA A. SILVER, Potential RNA binding proteins in *Saccharomyces cerevisiae* identified as suppressors of temperature-sensitive mutations in *NPL3* 103–115

HERMAN, ROBERT K., Worm spadework 1065–1068

HOCHSTENBACH, RON, HARRY HARHANGI, KARIN SCHOUREN, PETRA BINDELS, RON SUIJKERBUIJK and WOLFGANG HENNIG, Transcription of *gypsy* elements in a *Y*-chromosome male fertility gene of *Drosophila hydei* 437–446

HOLSINGER, KENT E., and ROBERTA J. MASON-GAMER, Hierarchical analysis of nucleotide diversity in geographically structured populations 629–639

HOLT, CYDNE L., and GREGORY S. MAY, An extragenic suppressor of the mitosis-defective *bimD6* mutation of *Aspergillus nidulans* codes for a chromosome scaffold protein 777–787

HONG, CHANG-SOOK, and BARRY GANETZKY, Molecular characterization of neurally expressing genes in the *para* sodium channel gene cluster of Drosophila 879–892

HSIA, AN-PING, and PATRICK S. SCHNABLE, DNA sequence analyses support the role of interrupted gap repair in the origin of internal deletions of the maize transposon, *MuDR* 603–618

HU, JIANPING, BETH ANDERSON and SUSAN R. WESSLER, Isolation and characterization of rice *R* genes: evidence for distinct evolutionary paths in rice and maize 1021–1031

HURD, DARYL D., MICHAEL STERN and WILLIAM M. SAXTON, Mutation of the axonal transport motor kinesin enhances *paralytic* and suppresses *Shaker* in Drosophila 195–204

HURST, LAURENCE D., Further evidence consistent with *Stellate*'s involvement in meiotic drive 641–643

HYDUK, DENIS, and ANTHONY PERCIVAL-SMITH, Genetic characterization of the homeodomain-independent activity of the Drosophila *fushi tarazu* gene product 481–492

IMAI, JUN, AKIO TOH-E and YASUSHI MATSUI, Genetic analysis of the *Saccharomyces cerevisiae RHO3* gene, encoding a Rho-type small GTPase, provides evidence for a role in bud formation 359–369

IVANOV, EVGENY L., NEAL SUGAWARA, JACQUELINE FISHMAN-LOBELL and JAMES E. HABER, Genetic requirements for the single-strand annealing pathway of double-strand break repair in *Saccharomyces cerevisiae* 693–704

JANSEN, RITSERT C., A general Monte Carlo method for mapping multiple quantitative trait loci 305–311

JENKINS, TRACIE M., CHRISTINA S. BABCOCK, DAVID M. GEISER and WYATT W. ANDERSON, Cytoplasmic incompatibility and mating preference in Colombian *Drosophila pseudoobscura* 189–194

JIA, YIWEN, GUOFENG XIE and ERIC AAMODT, *pag-3*, a *Caenorhabditis elegans* gene involved in touch neuron gene expression and coordinated movement 141–147

JOHNSON, STEPHEN L., MICHAEL A. GATES, MICHELE JOHNSON, WILLIAM S. TALBOT, SALLY HORNE, KRIS BAIK, SUNNY RUDE, JAMIE R. WONG and JOHN H. POSTLETHWAIT, Centromere-linkage analysis and consolidation of the zebrafish genetic map 1277–1288

JONES, KATHERINE H., JINGCHUN LIU and P. N. ADLER, Molecular analysis of EMS-induced *frizzled* mutations in *Drosophila melanogaster* 205–215

KAMPS, T. L., D. R. MCCARTY and C. D. CHASE, Gametophyte genetics in *Zea mays* L.: dominance of a restoration-of-fertility allele (*Rf3*) in diploid pollen 1001–1007

KEIGHTLEY, PETER D., TORSTEN HARDGE, LINDA MAY and GRAHAME BULFIELD, A genetic map of quantitative trait loci for body weight in the mouse 227–235

KIM, NACKSUNG, JAESEOB KIM, DONGKOOK PARK, CHRISTINA ROSEN, DALE DORSETT and JOHN YIM, Structure and expression of wild-type and suppressible alleles of the Drosophila *purple* gene 1157–1168

KNOOP, VOLKER, MICHAEL UNSELD, JOACHIM MARIENFELD, PETRA BRANDT, SABINE SÜNKEL, HENRIETTE ULLRICH and AXEL BRENNICKE, *Copia-*, *gypsy-* and LINE-like retrotransposon fragments in the mitochondrial genome of *Arabidopsis thaliana* 579–585

KOLMAN, CONNIE J., NYAMKHISHIG SAMBUUGHIN and ELDREDGE BERMINGHAM, Mitochondrial DNA analysis of Mongolian populations and implications for the origin of new world founders 1321–1334

KREBS, ROBERT A., and VOLKER LOESCHCKE, Acclimation and selection for increased resistance to thermal stress in *Drosophila buzzatii* 471–479

KUMAR, SUDHIR, KRISTI A. BALCZAREK and ZHI-CHUN LAI, Evolution of the *hedgehog* gene family 965–972

LAGZIEL, A., E. LIPKIN and M. SOLLER, Association between SSCP haplotypes at the bovine growth hormone gene and milk protein percentage 945–951

LAWRENCE, JEFFREY G., and JOHN R. ROTH, Evolution of coenzyme B_{12} synthesis among enteric bacteria: evidence for loss and reacquisition of a multigene complex 11–24

LI, QIUHONG, R. GARY RITZEL, LESLEY L. T. MCLEAN, LEE MCINTOSH, TAK KO, HELMUT BERTRAND and FRANK E. NARGANG, Cloning and analysis of the alternative oxidase gene of *Neurospora crassa* 129–140

LIU, JIANJUN, JOHN M. MERCER, LYNN F. STAM, GREGORY C. GIBSON, ZHAO-BANG ZENG and CATHY C. LAURIE, Genetic analysis of a morphological shape difference in the male genitalia of *Drosophila simulans* and *D. mauritiana* 1129–1145

LIU, SIN-CHIEH, STANLEY P. KOWALSKI, TIEN-HUNG LAN, KENNETH A. FELDMANN and ANDREW H. PATERSON, Genome-wide high-resolution mapping by recurrent intermating using *Arabidopsis thaliana* as a model 247–258

LOZOVSKAYA, ELENA R., DMITRY I. NURMINSKY, DANIEL L. HARTL and DAVID T. SULLIVAN, Germline transformation of *Drosophila virilis* mediated by the transposable element *hobo* 173–177

MA, CHAOYONG, HUI LIU, YING ZHOU and KEVIN MOSES, Identification and characterization of autosomal genes that interact with *glass* in the developing Drosophila eye 1199–1213

MANIVASAKAM, P., SUSAN M. ROSENBERG and P. J. HASTINGS, Poorly repaired mismatches in heteroduplex DNA are hyper-recombinagenic in *Saccharomyces cerevisiae* 407–416

MARÍN, IGNACIO, Genetic architecture of autosome-mediated hybrid male sterility in Drosophila 1169–1180

MAUTINO, MARIO R., JOSÉ L. BARRA and ALBERTO L. ROSA, *eth1*, the *Neurospora crassa* locus encoding S-adenosylmethionine synthetase: molecular cloning, sequence analysis and *in vivo* overexpression 789–800

MCALEAR, MICHAEL A., K. MICHELLE TUFFO and CONNIE HOLM, The large subunit of replication factor C (Rfc1p/Cdc44p) is required for DNA replication and DNA repair in *Saccharomyces cerevisiae* 65–78

MCDOWELL, JOHN M., SHURONG HUANG, ELIZABETH C. MCKINNEY, YONG-QIANG AN and RICHARD B. MEAGHER, Structure and evolution of the actin gene family in *Arabidopsis thaliana* 587–602

MCGRATH, J. MITCHELL, SUSAN M. WIELGUS and JOHN P. HELGESON, Segregation and recombination of *Solanum brevidens* synteny groups in progeny of somatic hybrids with *S. tuberosum:* intragenomic equals or exceeds intergenomic recombination 1335–1348

MCKEE, BRUCE D., and MARK T. SATTER, Structure of the *Y* chromosomal *Su(Ste)* locus in *Drosophila melanogaster* and evidence for localized recombination among repeats 149–161

MCNEIL, J. BRYAN, ANDREW L. BOGNAR and RONALD E. PEARLMAN, In vivo analysis of folate coenzymes and their compartmentation in *Saccharomyces cerevisiae* 371–381

MICHALAKIS, YANNIS, and LAURENT EXCOFFIER, A generic estimation of population subdivision using distances between alleles with special reference for microsatellite loci 1061–1064

MILLIGAN, BROOK G., Estimating long-term mating systems using DNA sequences 619–627

MURATA, SHIGENORI, NOBUYOSHI TAKASAKI, MASAKO SAITOH, HIDENORI TACHIDA and NORIHIRO OKADA, Details of retropositional genome dynamics that provide a rationale for a generic division: the distinct branching of all the pacific salmon and trout (*Oncorhynchus*) from the Atlantic salmon and trout (*Salmo*) 915–926

NACHMAN, MICHAEL W., WESLEY M. BROWN, MARK STONEKING and CHARLES F. AQUADRO, Nonneutral mitochondrial DNA variation in humans and chimpanzees 953–963

NACHMAN, MICHAEL W., and GARY A. CHURCHILL, Heterogeneity in rates of recombination across the mouse genome 537–548

NEJATI-JAVAREMI, ARDESHIR, and CHARLES SMITH, Assigning linkage haplotypes from parent and progeny genotypes 1363–1367

NEUMANN, CARL J., and STEPHEN M. COHEN, *Sternopleural* is a regulatory mutation of *wingless* with both dominant and recessive effects on larval development of *Drosophila melanogaster* 1147–1155

O'BROCHTA, DAVID A., WILLIAM D. WARREN, KENNETH J. SAVILLE and PETER W. ATKINSON, *Hermes*, a functional non-drosophilid insect gene vector from *Musca domestica* 907–914

OSMAN, FEKRET, ELIZABETH A. FORTUNATO and SURESH SUBRAMANI, Double-strand break-induced mitotic intrachromosomal recombination in the fission yeast *Schizosaccharomyces pombe* 341–357

PALUMBO, G., S. BONACCORSI, L. G. ROBBINS and S. PIMPINELLI, Genetic analysis of *Stellate* elements of *Drosophilia melanogaster* 327

PÂQUES, FRÉDÉRIC, BRUNO BUCHETON and MAURICE WEGNEZ, Rearrangements involving repeated sequences within a *P* element preferentially occur between units close to the transposon extremities 459–470

PECK, JOEL R., Limited dispersal, deleterious mutations and the evolution of sex 1053–1060

RAZAVY, HAIDE, SUSAN K. SZIGETY and SUSAN M. ROSENBERG, Evidence for both 3′ and 5′ single-strand DNA ends in intermediates in Chi-stimulated recombination *in vivo* 333–339

RICHARDS, STEPHEN, TIMOTHY HILLMAN and MICHAEL STERN, Mutations in the Drosophila *pushover* gene confer increased neuronal excitability and spontaneous synaptic vesicle fusion 1215–1223

RINCKEL, LORI A., and DAVID J. GARFINKEL, Influences of histone stoichiometry on the target site preference of retrotransposons Ty*1* and Ty*2* in *Saccharomyces cerevisiae* 761–776

ROBBINS, LEONARD G., GIOACCHINO PALUMBO, SILVIA BONACCORSI and SERGIO PIMPINELLI, Measuring meiotic drive 645–647

RODRÍGUEZ-TRELLES, FRANCISCO, GONZALO ALVAREZ and CARLOS ZAPATA, Time-series analysis of seasonal changes of the *O* inversion polymorphism of *Drosophila subobscura* 179–187

ROSS, LYLE O., SUSANNAH RANKIN, MICHÈLE F. SHUSTER and DEAN S. DAWSON, Effects of homology, size and exchange on the meiotic segregation of model chromosomes in *Saccharomyces cerevisiae* 79–89

ROUSSET, FRANÇOIS, Equilibrium values of measures of population subdivision for stepwise mutation processes 1357–1362

SABL, JOY F., and STEVEN HENIKOFF, Copy number and orientation determine the susceptibility of a gene to silencing by nearby heterochromatin in Drosophila 447–458

SANTOS-ROSA, HELENA, BEATE CLEVER, WOLF-DIETRICH HEYER and ANDRÉS AGUILERA, The yeast *HRS1* gene encodes a polyglutamine-rich nuclear protein required for spontaneous and *hpr1*-induced deletions between direct repeats 705–716

SAPARBAEV, MURAT, LOUISE PRAKASH and SATYA PRAKASH, Requirement of mismatch repair genes *MSH2* and *MSH3* in the *RAD1-RAD10* pathway of mitotic recombination in *Saccharomyces cerevisiae* 727–736

SARKAR, SAHOTRA, Lancelot Hogben, 1895–1975 655–660

SCOTT, LUANN, DANIEL LAFOE and CLIFFORD F. WEIL, Adjacent sequences influence DNA repair accompanying transposon excision in maize 237–246

SEITZ, LISA C., KELIANG TANG, W. JASON CUMMINGS and MIRIAM E. ZOLAN, The *rad9* gene of *Coprinus cinereus* encodes a proline-rich protein required for meiotic chromosome condensation and synapsis 1105–1117

SHCHERBAKOVA, POLINA V., and YOURI I. PAVLOV, 3′ → 5′ exonucleases of DNA polymerases ϵ and δ correct base analog induced DNA replication errors on opposite DNA strands in *Saccharomyces cerevisiae* 717–726

SHERIDAN, WILLIAM F., NADEZHDA A. AVALKINA, IVAN I. SHAMROV, TATYANA B. BATYGINA and INNA N. GOLUBOVSKAYA, The *mac1* gene: controlling the commitment to the meiotic pathway in maize 1009–1020

SHOOK, DAVID R., ANNE BROOKS and THOMAS E. JOHNSON, Mapping quantitative trait loci affecting life history traits in the nematode *Caenorhabditis elegans* 801–817

SIEDE, WOLFRAM, ANNA A. FRIEDL, IRINA DIANOVA, FRIEDERIKE ECKARDT-SCHUPP and ERROL C. FRIEDBERG, The *Saccharomyces cerevisiae* Ku autoantigen homologue affects radiosensitivity only in the absence of homologous recombination 91–102

SIMONELIG, MARTINE, KATE ELLIOTT, ANDREW MITCHELSON and KEVIN O'HARE, Interallelic complementation at the *suppressor of forked* locus of Drosophila reveals complementation between suppressor of forked proteins mutated in different regions 1225–1235

SMITH, J. MAYNARD, and N. H. SMITH, Synonymous nucleotide divergence: what is "saturation"? 1033–1036

SMITH, J. MAYNARD, and N. H. SMITH, Site-specific codon bias in bacteria 1037–1043

THÉROND, PASCAL, GEORGES ALVES, BERNADETTE LIMBOURG-BOUCHON, HERVÉ TRICOIRE, ELIZABETH GUILLEMET, JEANINE BRISSARD-ZAHRAOUI, CLAUDIE LAMOUR-ISNARD and DENISE BUSSON, Functional domains of Fused, a serine-threonine kinase required for signaling in Drosophila 1181–1198

TRUE, JOHN R., JOHN M. MERCER and CATHY C. LAURIE, Differences in crossover frequency and distribution among three sibling species of Drosophila 507–523

TRUE, JOHN R., BRUCE S. WEIR and CATHY C. LAURIE, A genome-wide survey of hybrid incompatibility factors by the introgression of marked segments of *Drosophila mauritiana* chromosomes into *Drosophila simulans* 819–837

TSUKAMOTO, YASUMASA, JUN-ICHI KATO and HIDEO IKEDA, Effects of mutations of *RAD50, RAD51, RAD52,* and related genes on illegitimate recombination in *Saccharomyces cerevisiae* 383–391

UEMURA, HIROSHI, SUNIL PANDIT, YOSHIFUMI JIGAMI and ROLF STERNGLANZ, Mutations in *GCR3,* a gene involved in the expression of glycolytic genes in *Saccharomyces cerevisiae,* suppress the temperature-sensitive growth of *hpr1* mutants 1095–1103

VERSAW, WAYNE K., and ROBERT L. METZENBERG, Activator-independent gene expression in *Neurospora crassa* 417–423

VIARD, FRÉDÉRIQUE, PHILIPPE BREMOND, RABIOU LABBO, FABIENNE JUSTY, BERNARD DELAY and PHILIPPE JARNE, Microsatellites and the genetics of highly selfing populations in the freshwater snail *Bulinus truncatus* 1237–1247

VOGEL, JODI L., VINCENT GEUSKENS, LUCIE DESMET, N. PATRICK HIGGINS and ARIANE TOUSSAINT, C-terminal deletions can suppress temperature-sensitive mutations and change dominance in the phage Mu repressor 661–672

WANG, JIANFAN, and RICHARD NEEDLEMAN, Removal of a Mig1p binding site converts a *MAL63* constitutive mutant derived by interchromosomal gene conversion to glucose insensitivity 51–63

WHARTON, KRISTI, ROBERT P. RAY, SETH D. FINDLEY, HOLLY E. DUNCAN and WILLIAM M. GELBART, Molecular lesions associated with alleles of *decapentaplegic* identify residues necessary for TGF-β/BMP cell signaling in *Drosophila melanogaster* 493–505

WIESCHAUS, ERIC, Embryonic transcription and the control of developmental pathways 5–10

WRIGHT, DAVID A., NING KE, JAN SMALLE, BRIAN M. HAUGE, HOWARD M. GOODMAN and DANIEL F. VOYTAS, Multiple non-LTR retrotransposons in the genome of *Arabidopsis thaliana* 569–578

WUESTEHUBE, LINDA J., RAINER DUDEN, ARLENE EUN, SUSAN HAMAMOTO, PAUL KORN, RACHNA RAM and RANDY SCHEKMAN, New mutants of *Saccharomyces cerevisiae* affected in the transport of proteins from the endoplasmic reticulum to the Golgi complex 393–406

XIONG, MOMAIO, HUBERT J. CHEN, ROLF A. PRADE, YUHONG WANG, JAMES GRIFFITH, WILLIAM E. TIMBERLAKE and JONATHAN ARNOLD, On the consistency of a physical mapping method to reconstruct a chromosome *in vitro* 267–284

YANG, RONG-CAI, FRANCIS C. YEH and ALVIN D. YANCHUK, A comparison of isozyme and quantitative genetic variation in *Pinus contorta* ssp. *latifolia* by F_{ST} 1045–1052

ZARDOYA, RAFAEL, and AXEL MEYER, The complete nucleotide sequence of the mitochondrial genome of the lungfish (*Protopterus dolloi*) supports its phylogenetic position as a close relative of land vertebrates 1249–1263

ZHANG, JIANZHI, and MASATOSHI NEI, Evolution of Antennapedia-class homeobox genes ... 295–303

ZHAO, HONGYU, and TERENCE P. SPEED, On genetic map functions 1369–1377

ZHAO, YINGPING, LORRIE P. DAGGETT and STEPHEN C. HARDIES, *Mus spretus* LINE-1s in the *Mus musculus domesticus* inbred strain C57BL/6J are from two different *Mus spretus* LINE-1 subfamilies 549–555